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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,192	09/25/2002	Ralph Gerald Isaacs	129633	8140
6147	7590	11/30/2004	EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59 NISKAYUNA, NY 12309			LAUCHMAN, LAYLA G	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/065,192

Applicant(s)

ISAACS ET AL.

Examiner

L. G. Lauchman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/12/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/2002.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6, 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al (US 6,748,112).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The patent teaches a system for the non-contact measurement of a surface of a part (airfoil) comprising (see Fig. 1, lines 4-18): a support 16 on which the part is mounted for holding the part 12 in a predetermined fixed position; a large area optical sensor 20 positioned so the part is substantially within the sensor's field of view at the distance from the sensor where the part is mounted on its support, the optical sensor measuring surface features of the part (see col. 4, lines 37-48); positioning means (col. 4, lines 29-34) on which the optical sensor is installed for moving the optical sensor over

the surface of the part in a non-contact manner to locate surface features of the part in a coordinate system; and, a processor processing the surface feature information and comparing the information with corresponding information from either a master part model or a reference part to determine acceptability of the part ( see col. 5, lines 6-17).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 5, 8-22 are rejected under 35 U.S.C. 103(a) as being obvious over Nguyen et al (US 6,748,112), and further in view of Dreyfus et Al (US 4,226,536).

The applied reference of Nguyen et al has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it

constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

As to Claims 2, 3, 5, 8-11, Nguyen teaches all as applied to Claim 1, except for a high resolution point sensor for locating and measuring the edges of the part. Dreyfus et al teach a non-contacting, electro-optical system adapted automatically to measure the counters of a rotor blade. It would have been obvious to one skilled in the art to use a second sensor in the invention of Nguyen for measuring the edges of the part, in order to minimize the time of the measurements and make the measurement system more efficient and able to measure more desired features in shorter time.

As to Claims 12-17, The patent teaches a system for the non-contact measurement of a surface of a part (airfoil) comprising (see Fig. 1, lines 4-18): a support 16 on which the part is mounted for holding the part 12 in a predetermined fixed position; an area optical sensor 20 for measuring surface features of the part (see col. 4, lines 37-48); positioning means (col. 4, lines 29-34) on which the optical sensor is installed for moving the optical sensor over the surface of the part in a non-contact manner to locate surface features of the part in a coordinate system; and a processor processing the surface feature information and comparing the information with corresponding information from either a master part model or a reference part to determine acceptability of the part ( see col. 5, lines 6-17). The patent to Nguyen does not teach a high resolution point sensor for locating and measuring the edges of the part. Dreyfus et al teach a non-contacting, electro-optical system adapted automatically to measure the counters of a rotor blade. It would have been obvious to one skilled in the art to use a second sensor in the invention of Nguyen for measuring the edges of the part, in order to minimize the time of the measurements and make the measurement system more efficient and able to measure more desired features in shorter time.

As to Claims 18-22, the apparatus resulting from the combination of the inventions Nguyen et al and Dreyfus will perform the method steps recited in said claims.

### ***Conclusion***

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to TC 2877 via the PTO Fax Center

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located in CP4-4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center number is (703) 872-9306.

If the Applicant wishes to send a Fax dealing with either a Proposed Amendment or for discussion for a phone interview then the fax should:

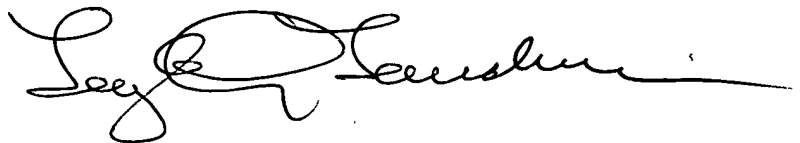
a) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and

b) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. G. Lauchman whose telephone number is (571) 272-2418. The examiner's normal work schedule is 8:00am to 4:30pm (EST), Monday through Friday. If attempts to reach examiner by the telephone are unsuccessful, the examiner's supervisor Gregory J. Toatley, Jr. can be reached on (571) 272-2059, ext. 77.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC receptionist whose telephone number is (571) 272-1562.

A handwritten signature in black ink, appearing to read 'L. G. Lauchman', with a long horizontal flourish extending to the right.

L. G. Lauchman  
Patent Examiner  
Art Unit 2877

November 24, 2004